

Note :

- (i) All questions are compulsory.
- (ii) **Section A** consists of 30 marks.
- (iii) **Section B** and **Section C** are of 20 marks each.
- (iv) Answer the questions after carefully reading the text.

SECTION A

1. Answer the following questions :
- a) What is a Freeware ? Give example. 2
 - b) Write in brief about the following – a) Mozilla b) Tomcat 2
 - c) Differentiate between economical feasibility and operational feasibility in system analysis. 3
 - d) What are the common features of a traditional database application ? 3
2. Answer the following questions:
- a) What is meant by variable lifetime ? How is static variable different from other variables ? 2
 - b) What are the different types of modules ? Write about their importance in VB programming. 2
 - c) What is focus ? When do GotFocus and LostFocus events occur ? 2
 - d) Differentiate between Call By Value and Call By Reference method of passing parameters into a procedure. 4
3. Answer the following questions :
- a) What is meant by Normalisation ? Define second normal form. 2
 - b) What is Transaction ? Differentiate Commit and Rollback statements. 2
 - c) Define Cursor. What is meant by Context Area ? 2
 - d) What is PL/SQL ? What are the advantages of PL/SQL ? 4

SECTION B

4. Excel Enterprise is a company, which deals in garments. The company has three departments - Cotton, Silk and Synthetic.

The screenshot shows a window titled "Excel Enterprises" with a standard Windows-style title bar. Inside the window, there are three text boxes on the left: "Enter Amount", "Fabric Type", and "Net Amount". The "Fabric Type" box is a dropdown menu currently showing "Cotton", with a list of options below it: "Cotton", "Silk", and "Synthetic". To the right of these text boxes is a group box titled "Payment Mode" containing three radio buttons: "Cash" (which is selected), "Cheque", and "Credit Card".

The company accepts payments in three modes – by cheque, cash and by credit card. The company offers the discount scheme on each purchase for customer as follows –

- a) For Cotton
 - Purchase above 5000 and avail discount 10%
 - Purchase above 7500 and avail discount 15%
- b) For Silk
 - Purchase above 5000 and avail discount 5%
 - Purchase above 7500 and avail discount 10%
- c) For Synthetic
 - Purchase above 5000 and avail discount 15%
 - Purchase above 7500 and avail discount 20%

Now, if the customer is paying by cash an additional 2% discount, if by cheque no discount, if by credit card 2.5% tax is to be paid by the customer.

- a) Write the command to by default make the option Cash available. 1
- b) Write the code to clear txtAmount, disable txtNetAmount and then set the focus in txtAmount. 2
- c) Write a procedure CallDiscount() to calculate the discount after selecting the type of cloth from the ComboBox named cmbFabType. 3

d) Write the code which will call CalDiscount() and display the net price after selecting the mode of payment. 4

5. Answer the following questions –

a) Identify the error(s), correct and re-write the code – 2

```
Private Sub Command1_Click ( )
    For i = 1 Upto 50
        if i mod 5 = 0
            p = 1
            Display - i is divisible by 5.
        Else
            Display - i is not divisible by 5.
        Next
    End Sub
```

b) Find the output of the following code segment –

2

```
Private Sub Command1_Click ( )
    Dim w As Integer, x as Integer
    w = 20
    x = 0
    Do while w < 20
        Print w * x
        If x = 10 then
            w = 20
        else
            x = x + 2
            w = w - 3
        End if
    Loop
```

c) Re-write the following code using *For ... Next – loop* :

2

```
x = 10
c = InputBox ("Enter a number")
Do While c >=1
    Print x
    x = x + 2
    c = c - 2
Loop
```

d) Write a Visual Basic function that accepts a string value and returns number of vowels present therein.

4

SECTION C

6. Read the questions given below and answer accordingly –

a) Write the output produced by the following part of code in PL/SQL :

2

```
Declare
A Number(3);
B Number(3);
Begin
A := 2;
For B in 1..5
Loop
A := A * B;
DBMS_OUTPUT.PUT_LINE(A);
End Loop;
End;
```

b) Find the errors from the following PL/SQL code and re-write the corrected code underlining the correction made - 2

```

Declare
  V_no Employee.Empno%Rowtype;
  V_sal number(8,2) :=1000;
Begin
  Loop
  Select Sal To V_sal from Employee where Eno = V_no;
  V_no = V_no + 1;
  Exit for V_no > 5;
  End Loop;
End;

```

c) Distinguish between PL/SQL function block and PL/SQL procedure block with suitable example. 2

d) Write a PL/SQL stored procedure that accepts two numbers as IN parameters and return the result of their division as OUT parameter. Write proper EXCEPTION handler for any possible run-time error. 4

7. Answer the following based on the two tables given below –

DEPARTMENT

Column Name	Data type	Size	Constraint
DEPT_NO	NUMBER	5	Primary Key
DEPT_NAME	VARCHAR	10	Not null

TEACHER

Column Name	Data type	Size	Constraint
TNO	CHAR	4	Primary Key
TNAME	VARCHAR	20	NOT NULL
TADDRESS	VARCHAR	30	
SALARY	NUMBER	7,2	>2000 (greater than 2000)
DEPT_NO	NUMBER	5	Foreign key Department (DEPT_NO)
DOJ	DATE		NOT NULL

a) Write SQL command to create table TEACHER including its constraints. 2

b) Create a view based on the tables TEACHER and DEPARTMENT to show TNAME,DEPT_NAME,SALARY and DOJ of teachers whose date of joining between '1-1-2005' to '31-12-2006'. 2

c) Write a cursor to display all the teachers' records from TEACHER table who are getting salary below 10000. 3

d) Write a before trigger to raise error when user inserts salary greater than 25000 in the TEACHER table. 3